Appl. No.: 10/068,087
Reply to Office Action dated July 3, 2006

Docket No.: MIT-086BUS

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

1   1. (Original) A reliability buffering method associated with a project planning model having
2   project plan data and having a plurality of activities, wherein each or the plurality of activities
3   has one or more activity time precedence relationships, comprising:
4   adding activity characteristics data to the project plan data;
5   generating a reliability buffer duration value corresponding to the project plan data; and
6   placing a reliability buffer in front of a downstream activity.

1   2. (Original) The reliability buffering method of claim 1, further comprising:
2   adding activity relationship data to the project plan data.

1   3. (Original) The reliability buffering method of claim 1, further comprising:
2   altering the one or more activity time precedence relationships.

1   4. (Original) A reliability buffering method associated with a project planning model having
2   project plan data, having a project schedule, and having a plurality of activities, comprising:
3   selecting a downstream activity from among the plurality of activities;
4   adding activity relationship data associated with the downstream activity and with at least
5   one upstream activity to the project plan data;
6   adding activity characteristics data associated with the downstream activity to the project
7   plan data; and
8   placing a reliability time buffer in a buffer time precedence relationship with the
9   downstream activity to provide a buffered downstream activity.

1   5. (Original) The reliability buffering method of claim 4, wherein adding activity relationship

2   data comprises:

3   adding a downstream sensitivity value associated with the activity time precedence

4   relationship to the project plan data.

1   6. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics

2   data comprises:

3   adding an activity reliability value to the project plan data.

1   7. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics

2   data comprises:

3   adding an activity production rate value to the project plan data.

1   8. (Original) The reliability buffering method of claim 4, wherein the buffer time precedence

2   relationship is finish to start.

1   9. (Original) The reliability buffering method of claim 4, further comprising:

2   generating a reliability buffer duration value associated with the reliability buffer and

3   corresponding to the project plan data; and

4   generating an activity time precedence relationship between the buffered downstream

5   activity and the at least one upstream activity, corresponding to the project plan data, to provide

6   an initial reliability buffer project plan.

1   10. (Original) The reliability buffering method of claim 9, wherein the activity time precedence

2   relationship is selected from the group consisting of finish to start, finish to finish, start to start,

3   and start to finish.

1   11. (Original) The reliability buffering method of claim 9, wherein generating the reliability

2   buffer duration value comprises:

3   selecting one or more upstream activities associated with the downstream activity from

4   among the plurality of activities; and

5   generating a reliability buffer duration value that reduces a simulated schedule delay to

6   the project schedule that occurs due to simulated schedule delays of respective ones of the one or

7   more upstream activities, and that increases a simulated schedule advance to the project schedule

8   that occurs due to simulated schedule advances of respective ones of the one or more upstream

9   activities.

1   12. (Original) The reliability buffering method of claim 11, wherein generating the reliability

2   buffer duration value comprises:

3   selecting a plurality of reliability buffer duration values; and

4   for each of the plurality of reliability buffer duration values,

5   generating a simulated project schedule and a simulated project cost;

6   analyzing the simulated project schedules and the simulated project costs

7   associated with the plurality of reliability buffer duration values; and

8   selecting the reliability buffer duration value and the associated project schedule

9   corresponding to a smallest simulated project schedule or associated with a smallest simulated

10   project cost.

1   13. (Original) The reliability buffering method of claim 9, wherein generating the activity time

2   precedence relationship comprises:

3   selecting a time precedence relationship from the group consisting of a finish to start

4   relationship, a finish to finish relationship, a start to finish relationship, and a finish to start

5   relationship;

6   selecting one or more upstream activities associated with the downstream activity from

7   among the plurality of activities; and

8   generating a reliability buffer lead or lag value that reduces a simulated schedule delay to

9   the project schedule that occurs due to simulated schedule delays of respective ones of the one or

10   more upstream activities, and that increases a simulated schedule advance to the project schedule

11   that occurs due to simulated schedule advances of respective ones of the one or more upstream

12   activities.

1   14. (Original) The reliability buffering method of claim 9, further comprising:

2   adding policy data to the project plan data.

1   15. (Currently Amended) The reliability buffering method of claim 14, wherein adding policy

2   data comprises:

3   adding at least one of:

4   a manpower availability versus time value;

5   a overtime and flexible headcount control value,

6   a time buffer,

7   a thoroughness of quality control value;

8   a hiring time control value, ~~and~~ or

9   a request for information (RFI) time duration value to the project plan data.

1   16. (Original) The reliability buffering method of claim 9, further comprising:

2   updating the project plan data to provide an updated reliability buffer project plan.

1   17. (Currently Amended) A project management system comprising:

2   a project data processor to provide project plan data; and

3   a reliability buffer processor adapted to receive ~~that~~ the project plan data and to generate

4   a project plan with reliability buffers.

1   18. (Currently Amended) The project management system of claim 17 further including a

2   project plan processor adapted to provide conventional project plan data to the project data

3   processor, and wherein the project data processor is adapted to receive the conventional project

4   plan data and to provide the project plan data.[-]